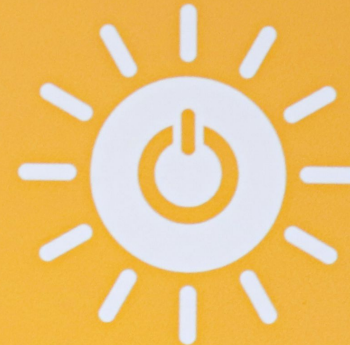


7 AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable,
reliable, sustainable and
modern energy for all



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University's annual energy consumption constitutes 21,482 kWh. The total generation of clean electricity in this year accounts for 31,525 kWh.



Renewable energy	Production (in KWH)
Biodiesel	3,000
Solar Panel	28,525
Total	31,525

Energy sources

The university's attention to the use of energy has the highest score in this ranking. In the Greenmetrics questionnaire, we are defined several indicators for this area of concern, energy-efficient appliances usage, the implementation of smart buildings/automation buildings/intelligent buildings, renewable energy usage policy, total electricity usage, energy conservation programs, elements of green buildings, climate change adaptation and mitigation programs, greenhouse gas emission reductions policy, and carbon footprint. Within these indicators, the university expected to increase its efforts in energy efficiency in the buildings and to care more about nature and alternative energy resources. There are the numbers of scores we earned by the UI Greenmetrics Rankings in 2023 in the following tables:

Indicator		Point
EC.1	Energy efficient appliances usage	150
EC.2	Smart building program implementation	225
EC.3	Number of renewable energy source in campus	150
EC.4	The total electricity usage divided by total campus population	225
EC.5	The ratio of renewable energy production towards total energy usage per year	100
EC.6	Element of green building implementation	200
EC.7	Greenhouse gas emission reduction program	150
EC.8	The ratio of total carbon footprint divided campus population	200
EC.9	Number of innovative program(s) in Energy and Climate Change	75
EC.10	Impactful university program(s) on climate change	100

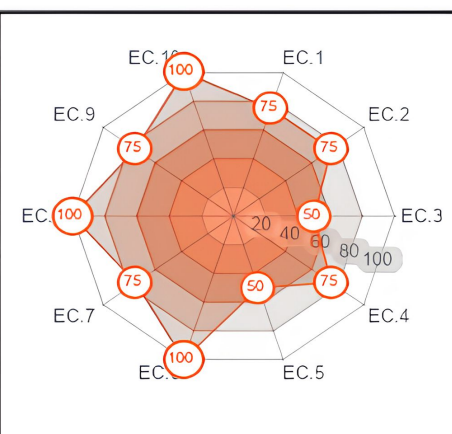


Figure 5.2 Percentage of Score to Maximum Score for Energy and Climate Change



Our latest speakers

We extend our sincere gratitude to the distinguished speakers who have contributed to these sessions. Their expertise and dynamic engagement have enhanced the learning experience by facilitating interactive lectures and stimulating discussions. Their efforts have not only informed participants about current issues in **waste-to-energy development** but have also inspired innovative thinking around potential solutions.

TSUULL University heartily thanks the speakers **Ph.D Kirill Lukianov**, the Researcher and **Ph.D Alexander. A. Smotritsky**, Founder & Chief Executive Officer at WiseSoil, who kept participants engaged by way of lecture, discussion, interaction and fun.

We SPEAK and students LEARN about Energy Efficiency

In alignment with our commitment to sustainability and environmental stewardship, the university has actively encouraged the organization of events focused on the theme of **waste-to-energy** development. These initiatives include **public talks, workshops, webinars, panel discussions, and interviews**, aimed at fostering a deeper understanding of waste management and its implications for green energy solutions. Participation in these events provides students and community members with valuable insights into innovative practices for converting waste into energy and fuels.



7 AFFORDABLE AND CLEAN ENERGY



SMART BUILDING IMPLEMENTATION

The ways that smart building technology enhances energy efficiency and functionality can significantly lower operating costs for university. Our university was adamant that its energy should serve its needs. The benefits of smart building implementation extend beyond just cost savings.



University collected average data from sensors to improve space utilization, streamline maintenance, and enhance the overall campus experience. For example, occupancy sensors helped to optimize classroom scheduling and reduce overcrowding, while predictive maintenance can identify potential issues before they become costly repairs.

Furthermore, implementing these technologies provided students with hands-on learning opportunities, particularly in fields like engineering, computer science, and environmental studies. By transforming their campuses into smart, efficient spaces, universities not only created a better environment for education but also demonstrate leadership in adopting innovative solutions that addressed the challenges of the future.

